Chapter 15:   CRL's Java Properties

CRL's Java properties are parameter-value pairs which must contain appropriate values in order for a **CRL** installation to operate correctly. Properties must be defined for database access information, for setting paths to target directories for various data and default browse paths, for turning on or off special features, and so on. The properties are contained in a file called `LogbookConfigParms.properties` which is stored under the `LogBook_admin` directory. The installation's **CRL** administrator must edit this file before **CRL** is invoked.

In this chapter, we list the properties with sample values, and provide descriptions. A few notes:

- In the file, each property definition is of the form `property_name = value`.

- The pound symbol (#) at the start of a line in the file indicates a comment line.

- Use the forward slash (/) as a directory delimiter for all the file path names; if the backward slash (\) is needed, a replacement will be done for you automatically.

- The command used to invoke the program (which is part of a `.bat` command file on Windows, or a script on Linux) must include a parameter that defines the top directory for the **CRL** program. **CRL** assumes that a `LogBook_admin` subdirectory resides directly under this top directory, and that the `LogbookConfigParms.properties` file resides in the `LogBook_admin` directory.

Parameter = Sample Value, and Description
`Logbook.debug_value = 0` Set debugging value. This is for development use. Set the value to 0 for "no debugging".
`Logbook.text.charset = UTF-8` Select the character set for writing out XML. (Use UTF-8.)
`Logbook.entry.text.fontsize = 12` Set the default character fontsize for entry text display.

Parameter = Sample Value, and Description
`Logbook.login.class = logbook.Login (or logbook.Login1D0)` Two methods for logging into **CRL** are available, one of which must be selected. The first method (implemented via `logbook.Login`) requires a PIN entry at login, the second method (originally customized for D0 and implemented via `logbook.Login1D0`) does not. These methods are described in Chapter 2: *Invoking and Logging Into CRL*.
`Logbook.login.timeout_in_hours = 9` The entry *Logbook.login.timeout_in_hours = x* will cause operators to be prompted after x hours to make one of three choices. They may either logout, ignore this warning but not future warnings, or ignore this and all future warnings. The prompt will be displayed until the user makes one of the three choices.
`Logbook.memory.lowFraction = 0.2` As of version 1_7_06, the Virtual Memory parameter that the CRL starts with was increased from 128M to 512M of memory, and a memory monitor was added which will display a warning when the free memory has reached a percentage of the total, as specified here. If this property is not included, the warning percentage defaults to 0.1, or 10%.
`Logbook.memory.monitorInterval = 0.02` This is the interval between each memory check and also the (approximate) interval between the start of the process and the 1st check. It is expressed in hours.
`Logbook.login.allow_anonymous = true` The entry *Logbook.login.allow_anonymous = true* will allow operators who did not log in to archive entries. These entries show "anonymous" in the entry header. *True* is the default value if this property is not set. If set to false, CRL allows only logged-in operators to archive entries, and thus all entries are "signed". This prevents creating anonymous entries.
`Logbook.container.filter = true` The entry *Logbook.container.filter = true* applies to all containers **except report containers**. It controls whether entries dropped into the container are filtered (to match category/topic of container). If the value is true, the container will filter archived entries before adding them to the container. If the value is false, there will be no filtering and any type of archived entry may be added to the container.
`Logbook.timezone = America/Chicago` Set the time zone appropriate for the location of your experiment's control room. A list of valid values can be found at `http://www.fnal.gov/docs/products/crl/misc/Time_Zone_Listing.txt`.
`Logbook.checkpoint_interval_in_minutes = 2.5` Entries are checkpointed at the time interval set here. This allows recovery of entries in the event of a crash or accidental deletion. The default interval is 2.5 minutes. At the end of every interval, all entries that have not yet been archived or deleted get written out into a Checkpoint directory. This directory is at the same directory level as Entries.
`Logbook.time_to_start_nagging_in_minutes = 120` "Nagging" alerts users to unarchived entries that have been active for the time period set here. The default period is 120.0 minutes. To disable nagging, set this value to 0.

Parameter = Sample Value, and Description
`Logbook.nag_interval_in_minutes = 25.0` "Nagging" alerts users to unarchived entries that have been active for a long time. Once the time period (above) has elapsed, a message appears on the user's desktop periodically. The time interval between successive messages is set here. The default interval is 25.0 minutes.
`Logbook.entry.image.maxwidth = 200` This value sets the maximum width in pixels of an image in a container. If the width exceeds this, then the image appears as a thumbnail.
`Logbook.entry.header.ShowKeywords = true` If set true, the keywords selected for each entry are displayed in the entry header. If false, then user must click the keyword symbol in the entryto see the selected keywords.
The following seven entries determine how much of the entry header is displayed by default in a CRL container window. The default values specified here can be changed via the Preferences button in the application. Valid values are true and false.
`Logbook.entry.header.ShowCategory = true`
`Logbook.entry.header.ShowCreateTime = true`
`Logbook.entry.header.ShowOperator = true`
`Logbook.entry.header.ShowSavedLocation = true`
`Logbook.entry.header.ShowSavedTime = true`
`Logbook.entry.header.ShowSequenceNumber = true`
`Logbook.entry.header.ShowTopic = true`
The following nine entries define the individual data directories. They can be absolute or relative paths, or an environment variable (use of environment variables is described in Chapter 11: *Configuring and Launching CRL*)

`Logbook.file_location.entry_directory =`
`    D:/path/to/CRLdata (Windows) or`
`    /path/to/CRLdata (Linux)`
Set this to the directory in which to store the archived logbook entry files in XML format. CRL users need write access to this directory in order to log entries. This directory gets created on first launch of CRL.

`Logbook.file_location.forms_directory =`
`    D:/path/to/CRLforms (Windows) or`
`    /path/to/CRLforms (Linux)`
Set this to the directory in which to store the DTD and XML files that define the logbook entry forms. CRL users need read access to files under this directory.

Parameter = Sample Value, and Description

`Logbook.file_location.inquiries_directory =`
    `D:/path/to/CRLinquiries (Windows) or`
    `/path/to/CRLinquiries (Linux)`
Set this to a default location for storing inquiries (see section 8.2 *Inquiries*). (A user can type in or browse for a different location in which to save an inquiry.) CRL users need write access to this directory in order to save inquiries.

`Logbook.file_location.files_directory`
    `D:/path/to/CRLfiles (Windows) or`
    `/path/to/CRLfiles (Linux)`
Set this to the top of a default file browse path (displayed when a user attempts to import a file into a **CRL** entry). For convenience, any files that are generated for the purpose of including them in logbook entries should reside underneath the directory specified here.

`Logbook.file_location.histograms_directory =`
    `D:/path/to/CRLhistograms (Windows) or`
    `/path/to/CRLhistograms (Linux)`
Set this to the top of a default histogram browse path (displayed when a user attempts to import a histogram file into a **CRL** entry). For convenience, any histograms that are generated for the purpose of including them in the logbook should reside underneath the directory specified here.

`Logbook.file_location.annotate_directory =`
    `D:/path/to/CRLannotations (Windows) or`
    `/path/to/CRLannotations (Linux)`
Set this to the directory in which to store the annotation files. CRL users and remote users need write access to this directory in order to annotate entries.

`Logbook.file_location.exported_files_directory =`
    `D:/path/to/CRLexportedFiles (Windows) or`
    `/path/to/CRLExportedFiles (Linux)`
Set this to the top of a default binary file export browse path (displayed when a user attempts to export a binary file from a previously archived entry to the file system). CRL users need write access to this directory.

`Logbook.file_location.www_directory =`
    `D:/path/to/CRLwww (Windows) or`
    `/path/to/CRLwww (Linux)`
The XML entries are automatically copied and converted to HTML for web browsing. Set this to the directory in which to store the HTML entry files. CRL users need write access to this directory. This directory gets created on first launch of CRL.

`Logbook.file_location.mail_list_directory =`
    `D:/path/to/CRLmaillists (Windows) or`
    `/path/to/CRLmaillists (Linux)`
Form entries may be configured to get mailed to a list of recipients when the entries are archived. This parameter gives the path to the directory containing the mail list files, if used.

Parameter = Sample Value, and Description

`Logbook.file_location.temp_directory =`
    `D:/path/to/Temp (Windows) or`
    `/path/to/Temp (Linux)`
This defines the directory where the temporary files for the PostScript /PDF convert utilities are stored. If this is not specified, a thumbnail will not be created and the user will not be able to view PostScript or PDF files directly.

`Logbook.mail.from = joe@fnal.gov (or from_list.txt)` This defines a "from" email address for entries that are emailed out. This may be an individual address, a mailing list or a file. If file, the file must reside in the directory specified by: Logbook.file_location.mail_list_directory
`Logbook.mail.smtp_host = smtp.fnal.gov` This defines the outgoing mail server.

`Logbook.utils.imagemagick =`
    `D:/path/to/imagemagick.exe (Windows), or`
    `/path/to/imagemagick (Linux)`
This defines the path to ImageMagick's convert utility. Install this utility on your system. This utility is used to generate a small jpg (a thumbnail) of a PostScript or PDF file. The thumbnail itself gets saved with the entry. If this property is not specified, no thumbnail will be generated.

`Logbook.utils.psviewer =`
    `D:/path/to/gsview32.exe (Windows), or`
    `/path/to/ghostview (Linux)`
This defines the path to a PostScript viewer, e.g., GhostView. Install this utility on your system. It is used to view PostScript files in archived entries.

`Logbook.utils.pdfviewer`
    `D:/path/to/AcroRd32.exe (Windows), or`
    `/path/to/Acroread (Linux)`
This defines the path to the Acrobat PDF viewer. Install this utility on your system. It is used to view PDF files in archived entries.

The following ten entries define the database information.
`Logbook.database.enabled = true` Set to "true" (no quotes) to enable database code (the usual case). Only set to "false" if for some reason the database is temporarily unavailable. When set to "false", logbook entries are still collected in the file system as XML, but pointers to them are not included in the SQL database.
`Logbook.database.vendor = mysql` The database vendor
`Logbook.database.version = 3.22` The database version

`Logbook.database.driver =`
    `org.gjt.mm.mysql.Driver (for MySQL), or`
    `sun.jdbc.odbc.JdbcOdbcDriver (for ODBC)`
The database driver appropriate for the database vendor and version.

Parameter = Sample Value, and Description

`Logbook.database.connection_url =`
    `jdbc:odbc:<filename>`
(Optional)
If the connection URL (location of the database) is not of the form `<proto-col>//<machine_name>/<database>?user=<username>&pass-word=<password>`, then set this value to the connection URL. If set, the value must start with `jdbc:`. The sample value shows ODBC with local file.
If left unset, then **CRL** uses the values of `Logbook.database.protocol`, `Logbook.database.server`, `Logbook.database.dbms_name`, `Logbook.database.username`, and `Logbook.database.pass-word` to build the value.

`Logbook.database.protocol = jdbc:mysql: (or jdbc:odbc:)` The database protocol. It must start with `jdbc:`. If `Logbook.database.connection_url` is set, this is ignored.
`Logbook.database.server = xyz.fnal.gov` The database server is the IP address of the machine running database. If `Logbook.database.connection_url` is set, this is ignored.
`Logbook.database.dbms_name = crl_dbms` The name of the database set up for use by CRL. If `Logbook.data-base.connection_url` is set, this is ignored.
`Logbook.database.username = myname` The database username to use for CRL's access to the database. If `Logbook.data-base.connection_url` is set, this is ignored.
`Logbook.database.password = mypassword` The username's password. If `Logbook.database.connection_url` is set, this is ignored.